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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,830	06/30/2003	Volker Herrmann	15283A-002300US	3866
20350	7590	08/24/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			THOMPSON, JEWEL VERGIE	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,830

Applicant(s)

HERRMANN ET AL.

Examiner

Jewel V Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. Acknowledgement is made of the Information Disclosure Statement filed February 2, 2004 which has been made record of and placed in the file.

### ***Priority***

2. Acknowledgement is made of the Priority filed February 2, 2004, which has been made record of and placed in the file.

### ***Pre-Amendment***

3. Acknowledgement is made of the Pre-Amendment filed February 2, 2004, which has been made record of and placed in the file.

### ***Drawings***

4. **Figures 2b, 3b, 5 a and b, and 6 a and b** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be

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notified and informed of any required corrective action in the next Office action.

The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because **fig. 4 has no reference numbers**.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The disclosure is objected to because of the following informalities: the disclosure refers to claims in paragraph 1, line 2 and page 3.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuda et al (4,380,934).

**Regarding claim 1**, Okuda et al teaches a device for measuring the flow velocity and/or the volumetric throughput of a fluid by means of ultrasound (fig. 1), having at least two ultrasound producing (18) or ultrasound receiving elements (22) arranged on an outside of a wall (fig. 1) of a fluid pipeline (10) forming a measurement housing (fig. 2), characterized in that a portion of the wall (fig.1) forms an ultrasound emitting or receiving membrane (12) of an ultrasonic transducer (18, 22), and the wall portion forming the membrane (12) is dimensionally adapted to the ultrasonic transducer (fig. 1).

**Regarding Claim 2**, Okuda et al teaches the ultrasonic transducer (22) is of a lengthwise oscillating type (fig. 1) and a waveguide (col. 3, lines 20-24) is arranged between the ultrasound producing or receiving element (22) and the membrane (figs. 1 and 2).

**Regarding claim 3**, Okuda et al teaches a contact region (30) between the waveguide and the wall portion has a form-fitting configuration (figs. 1 and 2).

**Regarding claim 5**, Okada et al teaches the wall portion is thinner than the remainder of the wall (fig. 1)

**Regarding claim 6**, Okuda et al teaches the ultrasonic transducer extends at least partly into the wall (fig. 1).

**Regarding Claim 7**, Okuda et al teaches a cover (40) covers the ultrasonic transducer extending into the wall (fig. Fig. 2).

**Regarding claim 10**, Okuda et al teaches the ultrasonic transducer is arranged so that a measurement pathway lies outside a diameter of the pipe (fig. 1).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al.

**Regarding Claim 4**, Okuda et al fails to explicitly teach the contact region between the waveguide and the wall has a spherical shape. Okuda et al does teach a contact region (30). However, although it is not specifically taught that the shape of the region is spherical, but it would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the contact region of Okuda et al for the purpose of sealing the open end of the housing. (see M.P.E.P. 2144.4)

9. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al. in view of Leschek et al (Re. 29,785)

**Regarding Claim 8**, Okuda et al fails to teach a spring biasing the ultrasonic transducer against the wall forming the membrane. Leschek et al teaches a spring seated against the contact member (34). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the spring which is against the contact member of Leschek et al in the device of Okuda et al for the purpose of providing a damping.

**Regarding claim 9**, Okuda et al fails to teach the spring is propped against the cover. Leschek et al teaches a spring (40) seated against a plate member. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the spring of Leschek et al in the flow



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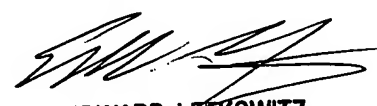
measuring device of Okuda et al for the purpose of applying an effective mechanical compressive force to hold together the acoustically coupled surfaces of the damping block, the piezoelectric element and the acoustic window (col. 3, line 66-col. 4, line 2, Leschek et al)

### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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